

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A magnetic tape comprising:

a plurality of servo bands on each of which ~~are~~ is written a different servo signals-signal for tracking control of a magnetic head, and

data is embedded in each servo signal for specifying the servo band corresponding to the data,

~~wherein data is embedded in a servo signal written on one of the servo bands, and the data is for specifying the servo band where the servo signal positions.~~wherein reading the data enables a servo read head of the magnetic head to specify on which servo band the servo read head is currently positioned without referring to other servo bands.

2. (original): A magnetic tape according to claim 1, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by shifting a pair of nonparallel stripes along the longitudinal direction of the magnetic tape.

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3. (original): A magnetic tape according to claim 1, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by varying a width of a pair of nonparallel stripes.

4. (original): A magnetic tape according to claim 1, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by changing a spacing interval between adjacent continuous patterns sets.

5. (original): A magnetic tape according to claim 1, wherein the servo bands are previously DC erased.

6. (currently amended): A method of specifying a servo band from a plurality of servo bands formed on a magnetic tape, comprising the steps of:

reading data ~~that is embedded in a servo signal written on one of the servo bands for specifying the servo band where the servo signal positions~~ with a servo read head to specify on which servo band the servo read head is currently positioned, each of the plurality of servo bands having a different servo signal in which the data is embedded; and

specifying the servo band ~~where-on which the servo read head is currently positioned without referring to other servo bands~~ the servo signal positions based on the data.

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7. (original): A method of specifying a servo band according to claim 6, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by shifting a pair of nonparallel stripes along the longitudinal direction of the magnetic tape.

8. (original): A method of specifying a servo band according to claim 6, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by varying a width of a pair of nonparallel stripes.

9. (original): A method of specifying a servo band according to claim 6, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by changing a spacing interval between adjacent continuous patterns sets.

10. (original): A method of specifying a servo band according to claim 6, wherein the servo bands are previously DC erased.

11. (previously presented): A method of specifying a servo band according to claim 6, wherein specifying the servo band is carried out by reading only one servo band.

12. (currently amended): An apparatus for specifying a servo band from a plurality of servo bands formed on a magnetic tape, comprising:

a servo read head for reading a servo signal written on one of the servo bands as well as for reading data that is embedded in each servo signal which is different from each other and written on the plurality of servo bands; and

a servo band specifying section for specifying, without referring to other servo bands, on which servo band from the servo signal written on one of the servo bands to be read out by the servo read head is currently positioned, from the data to be read out by the servo read head, the servo band where the servo signal positions.

13. (previously presented): An apparatus for specifying a servo band according to claim 12, wherein specifying the servo band is carried out by reading only one servo band.

14. (original): A method of manufacturing a magnetic tape of claim 1 comprising:
a first step of encoding data for specifying a servo band where the servo signal positions:
a second step of converting the data that is encoded in the first step into a recording pulse current; and

a third step of supplying the recording pulse current to the servo write head and writing on the servo band of the magnetic tape a servo signal in which is embedded the encoded data.

15. (original): A method of manufacturing a magnetic tape of claim 2 comprising:

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a first step of encoding data for specifying a servo band where the servo signal positions:

a second step of converting the data that is encoded in the first step into a recording pulse current; and

a third step of supplying the recording pulse current to the servo write head and writing on the servo band of the magnetic tape a servo signal in which is embedded the encoded data.

16. (original): A method of manufacturing a magnetic tape of claim 3 comprising:

a first step of encoding data for specifying a servo band where the servo signal positions:

a second step of converting the data that is encoded in the first step into a recording pulse current; and

a third step of supplying the recording pulse current to the servo write head and writing on the servo band of the magnetic tape a servo signal in which is embedded the encoded data.

17. (original): A servo writer used for manufacturing a magnetic tape of claim 1, comprising:

a magnetic tape running mechanism for taking up with a take-up reel the magnetic tape that is fed out from a supply reel;

a servo write head for writing a servo signal on a servo band of the magnetic tape in a manner contacting with the magnetic tape while the magnetic tape is running;

a controller for encoding data for specifying a servo band where the servo signal positions; and

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a pulse generation circuit for converting the encoded data outputted from the controller into a recording pulse current, and for supplying the recording pulse current to a coil of the servo write head.

18. (original): A servo writer used for manufacturing a magnetic tape of claim 2, comprising:

a magnetic tape running mechanism for taking up with a take-up reel the magnetic tape that is fed out from a supply reel;

a servo write head for writing a servo signal on a servo band of the magnetic tape in a manner contacting with the magnetic tape while the magnetic tape is running;

a controller for encoding data for specifying a servo band where the servo signal positions; and

a pulse generation circuit for converting the encoded data outputted from the controller into a recording pulse current, and for supplying the recording pulse current to a coil of the servo write head.

19. (original): A servo writer used for manufacturing a magnetic tape of claim 3, comprising:

a magnetic tape running mechanism for taking up with a take-up reel the magnetic tape that is fed out from a supply reel;

a servo write head for writing a servo signal on a servo band of the magnetic tape in a manner contacting with the magnetic tape while the magnetic tape is running;

a controller for encoding data for specifying a servo band where the servo signal positions; and

a pulse generation circuit for converting the encoded data outputted from the controller into a recording pulse current, and for supplying the recording pulse current to a coil of the servo write head.

20. (previously presented): A magnetic tape according to claim 1, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by varying the thickness of said stripes.

21. (previously presented): An apparatus for specifying a servo band according to claim 12, further comprising:

a reserve servo read head for use if said servo read head malfunctions.

22. (previously presented): A magnetic tape according to claim 1, wherein specifying the servo band is for accurate tracing of a magnetic head position, and is carried out on a single servo band.

23. (previously presented): An apparatus for specifying a servo band according to claim 21, wherein the servo read head and the reserve servo read head respectively read a different servo band.

24. (previously presented): An apparatus for specifying a servo band according to claim 21, wherein the servo read head and the reserve servo read head are provided in one head unit.

25. (previously presented): A magnetic tape according to claim 1, wherein a plurality of servo bands are arranged along the width of the magnetic tape, and a position of one servo band along the width of the magnetic tape can be specified from the data written on this one servo band.

26. (previously presented): A magnetic tape according to claim 25, wherein different data is written on each of the plurality of servo bands.

27. (previously presented): A magnetic tape according to claim 1, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by varying a width of each stripe of a pair of nonparallel stripes.

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28. (previously presented): A method of specifying a servo band according to claim 6, wherein the servo signal consists of a plurality of continuous patterns sets each of which pattern is nonparallel stripes, and the data is embedded in the servo signal by varying a width of each stripe of a pair of nonparallel stripes.

29. (new): A magnetic tape according to claim 1, wherein the data is written as a part of manufacturer information.

30. (new): A method of specifying a servo band according to claim 6, wherein the data is written as a part of manufacturer information.

31. (new): An apparatus for specifying a servo band according to claim 12, wherein the data is written as a part of manufacturer information.